

Implementation Team Meeting Notes

January 12, 2006

1. Greetings and Introductions.

Today's Implementation Team meeting was chaired by Jim Ruff and facilitated by Donna Silverberg. The following is a summary, not a verbatim transcript, of the topics discussed and decisions made at this meeting. Anyone with questions or comments about these notes should contact Kathy Ceballos at 503-230-5420.

2. Updates.

A. In-Season Management (TMT). Paul Wagner said one of the upcoming items the TMT will be discussing is the Corps' implementation plan for the Redden decision – the timeline for completing that isn't firm yet, but it will be done before the 2006 in-season management period begins. I talked with Rock Peters about that yesterday, said Ruff; we would like to ensure that the 2006 Water Management Plan that is implementing the court-ordered spill continues to remain in the Regional Forum process. Last year it was necessary to make some adjustments to the summer spill operation to accommodate adult passage. I would like to be sure that we continue to discuss similar issues this year, Ruff said. As opposed to having to get all of the lawyers together? Doug Marker asked. Prior to that, Ruff replied – I would like to make sure that everyone has an opportunity to provide their input if any changes are needed. We all know what the court order says; if changes are necessary for research purposes, for example, I want to be sure those changes are discussed through SRWG and TMT technical forums.

The January final runoff forecasts are now available, said Wagner; I would simply observe that what we see here in Portland – the recent high levels of precipitation – isn't necessarily reflective of the rest of the basin. The upper part of the basin, for example, is considerably drier than the west side of the Cascades. The current Libby snowpack is 87% of average for this date; at Dworshak, runoff is expected to be 98% of average; at Grand Coulee, 92% of average. This forecast doesn't reflect the precipitation that has fallen so far in January, however, Wagner said.

The chum operation is now to provide incubation flows, with a minimum tailwater elevation at Bonneville of 11.5 feet, said Wagner; that operation was maintained until the last week, when the tailwater came up due to the rain. The chum had pretty much done their spawning by that time, so 11.5 feet is the assumed highest redd deposited. The current tailwater elevation at Bonneville is 18-20 feet, Wagner said.

With respect to current operations, the current elevation is 2411.7 at Libby, with minimum outflow, Wagner said. Dworshak is at elevation 1531.5 with minimum outflow. Grand Coulee is at elevation 1288.6 feet, near full. The fall/winter update will be finalized at the next TMT meeting, scheduled for February 1.

I notice that Libby is down near its flood control elevation, while Grand Coulee is nearly full, said Ruff – do you expect to draft Grand Coulee for flood control this month? I don't know the answer to that, Eric Braun replied – we can look into that. Hungry Horse is at elevation 3590 feet, and operating to meet the Columbia Falls minimum of 3.5 Kcfs, said Silverberg.

B. Independent Scientific Advisory Board (ISAB). Doug Marker said the ISAB is in the process of reviewing the 2005 summer spill operation. The group is expected to complete its review January 18. The ISAB met on January 7 and received a variety of presentations; the summer spill report is expected to be completed on time.

The Council also asked the ISAB for a review of the criticism of the draft CSS report from BPA and the NMFS Science Center, said Marker; that review is also expected to be available by January 18. The ISAB is scheduled to meet at the end of this month, I believe on January 27, said Ruff. The ISAB will be asked to review the development of the new mainstem fish passage model, he said. We asked for that so that we have scientific peer review of the modeling tool we may be using to analyze juvenile fish survival and passage in the BiOp remand. An ISAB review generally takes four to six weeks, Ruff added. And will the ISAB be providing a presentation to the Council? asked Shauna McReynolds. If so, it will be in February, Marker replied.

C. Water Quality Team (WQT). Ruff said the WQT is meeting next Tuesday. The WQT's Lower Columbia TDG monitoring subgroup has been meeting; in summary, the action agencies were still unwilling to remove the Camas/Washougal gage for TDG monitoring. However, we agreed to work collaboratively to develop a Lower Columbia water quality monitoring strategy. Until that strategy is completed, both the tailrace monitor and the Camas/Washougal gage will remain in place. The action agencies' concern is water quality in the shallow water habitat from the Bonneville tailrace down to about river-mile 46, Ruff said; after that, elevated levels of TDG have dissipated – it doesn't extend to the estuary. The subgroup will continue to meet to discuss a long-term strategy, he added. Braun noted that the Corps has been treating everything below Bonneville Dam as the estuary.

In addition, the Corps issued a contract for a technical report to look at the state

of the science, in terms of recent research into the effects of TDG on resident fish, aquatic life and salmonids. There have been some discussions at WQT and comments from the subgroup members to the researchers on their draft report to help them narrow their scope and refine the final report, Ruff said. They're in the process of preparing that final report; it should be available by the end of this month. The Corps is also doing some further work to analyze the characteristics of TDG in the Bonneville tailrace, Ruff said. The message is that there are possible changes in the works for how TDG is monitored below Bonneville Dam, but in 2006, both the tailrace monitor and the Camas/Washougal gage will be in place, said Ruff.

D. System Configuration Team (SCT). Ruff reported that the FY'06 CRFM program has an \$85 million budget; it doesn't appear that savings and slippage will be deducted, and virtually all of the items that were prioritized for funding will be funded. I would like to thank everyone who supported that budget, said Ruff; one of the most important items in the budget is the Lower Monumental RSW, which is a two-year construction project.

The Appropriations Committee, in their language, added a sentence or two about how big-ticket items such as RSWs are funded, Ruff continued. They implied that the entire capital expense has to be covered in a single appropriations bill – in other words, it all has to be capitalized up-front. The next SCT meeting is January 26, said David Wills; that Appropriations language will be a discussion point. John Kranda has confirmed that the full cost of a capital construction item has to be covered within a fiscal year – for example, all \$15 million for the Lower Monumental RSW, rather than \$12 million one year and \$3 million the next. Kranda said the Corps is investigating ways to work collaboratively with Congress to meet both Congress' needs and the needs of the CRFM program, but the issue has not yet been resolved, said Wills. That could really change the way the SCT does business, Ruff said – there is only so much work the Corps' contractors can accomplish in a year, and if funding cannot be carried over from year to year, that will bring about some major changes to the CRFM program. We'll ask Bill Hevlin to update us on this issue at our next meeting, said Ruff – it's something we need to be kept informed about.

E. FCRPS Litigation Update. Mark Eames from NOAA General Counsel's office said the December 15 hearing considered the plaintiff's motion for a preliminary injunction to specify operations for the 2006 operating season. Judge Redden, on December 29, ordered the plaintiff's spill request for the late spring and late summer to be accepted. He accepted the federal proposal for early spring and early summer spill. He denied the plaintiff's request for measures to address flow.

The federal agencies filed their first quarterly status report on January 3, Eames continued. Right now, comments are being filed on that report; the court has received comments from the NWF, the Nez Perce and Lower River tribes and the Spokane Tribes. This is leading up to a status conference on January 20, next Friday at 9 am. The next status report after that will be due at the beginning of April, Eames said.

Ruff noted that the IT had just been discussing the 2006 water management plan that will incorporate the judge's order for preliminary injunctive (PI) relief. There was some discussion about, if there are any refinements similar to what had to be done for summer spill last year, that those refinements be handled through TMT. We wanted to check in with you about that – we hope it won't be a problem to work those out through the Regional Forum process. It shouldn't be a problem, but if what the Regional Forum comes up with is in conflict with the plaintiffs' desires or the judge's order, I would want to be sure that we have a discussion with the plaintiffs about that, Eames replied.

The judge has ordered us to file implementation reports throughout the season, Eames said; those reports should include any refinements that are necessary. It does seem to me that the TMT is the logical place to fully vet the operation, and to gather any relevant information. We're not anticipating any changes, said Ruff, but I wanted to check with you that, if there is a need to refine the operation, that it would be logical to discuss them within the Regional Forum. Certainly the plaintiffs will be kept fully informed, Ruff said. My main concern is the research operations, said Ruff; we need to gather this survival information, and the Corps has a large investment in tags and other equipment. We intend to implement the PI, but there may be some refinements to the spill operation necessary to accommodate the planned research.

3. RM&E Issues.

A. Update on Fall Chinook Transport Study Plans. Braun said the Corps is still working on the details of the 2006 study plan. The Nez Perce Tribe has agreed to mark the surrogate fish for the study; they're not prepared to mark the production fish until there is regional agreement on a study plan. There is a US v. Oregon meeting scheduled for February 7-8, at which this issue will be discussed, he added. There was a policy workshop in late November, with several follow-up meetings, at which we produced a draft study design that included marked naturally-produced wild fish and marked production fish, and marked hatchery surrogates, added Tony Nigro. Paul Ocker has suggested that the group that has been working on this issue meet next week, to iron out the final details, and to address the Nez Perce Tribe's concerns about marking production fish, Nigro said; we're also working within the US v. Oregon process to address those concerns. In short, we're moving ahead, said Nigro.

So there will be two or three groups of marked fish? Ruff asked. Three groups, Nigro replied – naturally-produced fish that are trapped and marked, hatchery production fish that will serve as surrogates to naturally-produced fish, and fish from the production facilities themselves. That topic will be discussed by the ad hoc technical group that has been talking about this next week, and at the US v. Oregon policy committee meeting on February 7-8, he added. In response to a question from John Palensky, Nigro explained that the hatchery-produced "surrogates" are being raised to a smaller size, to mimic the morphology of naturally-produced fish. Nigro emphasized that all of these ongoing discussions are solely in the context of a 2006 experimental design;

there is also a commitment among the concerned parties to get a long-term study plan in place as soon as possible, but that hasn't happened yet, obviously. One of the outstanding issues is what are the upstream/downstream components of such a long-term experimental design, he added.

Rock Peters noted that the Corps executives are very concerned about the duration of this study – is it a three-year study or 20-year study? They need some idea of that before they're willing to endorse it, said Peters. We understand that – that's one of the questions we're working to answer, he added.

B. Northwest Transmission System Bottlenecks. Mike Viles, an engineer with BPA's Transmission Business Line, led this presentation, titled "NW Transmission System Bottlenecks and Impacts of 2005 Summer Spill Operation." Using the overhead projector, he touched on the following major topics:

- Transmission loading characteristics – NW load peaks in winter; California load peaks in summer
- NW paths and seasonal direction of power flow (map). During the summer, the primary flow of power is north to south.
- Summer 2005 problem areas – North of Hanford path (two 500-kV lines east of the Cascades), Paul-Allston path (two 500 kV lines between Olympia and Longview), Allston-Keeler path
- Transmission impacts of increased spill on Lower Snake and Lower Columbia projects – reduced generation at the Lower Snake and Lower Columbia plants, increases north to south flow across problem paths, reduces the transfer capability from the Northwest to California.
- North of Hanford path – actual power flows, June 1-September 15, in MW
- Peak generation changes between June 17 and June 21, 2005 (flow chart) – summer 2005 increased spill operations resulted in greatly increased power flow from north to south over key constrained transmission paths
- Problems: exceeding the Operational Transfer Capability (OTC) of these paths. Operating above an OTC increases the risk of unreliable system response to critical contingencies. WECC requires that the actual flow on these paths gets below the OTC within 30 minutes. The amount of OTC excursions and time above OTC was significantly higher in summer 2005 than in summer 2004.
- Path flows over OTC, June-August 2004 vs. June-August 2005 (bar chart) – 174 individual five-minute readings above OTC, total, in 2005, compared to only 18 in 2004.
- Time above OTC, by path, 2004 vs. 2005 – much longer durations in 2005.
- Response to OTC excursions – in August 2005, there were 29 periods when the OTC of one of these paths was exceeded for at least

five minutes; 20 of those OTC excursions required the dispatcher to take some action to reduce the flow on the path. In some cases, the dispatcher action was significant.

- OTC excursions and response actions, August 2005 (table).
- Dispatcher actions, August 2005 (table).

In summary, said Viles,

- Increased spill changes generation patterns and increased north to south flow on the NW transmission system
- The transmission system was operated “closer to the edge” in summer 2005 than in summer 2004 (i.e., significantly more OTC excursions)
- OTC excursions can result in significant dispatcher action to control.

So to put this into perspective, is this a big problem, or a small problem? Rohr asked. In part, that depends on how far above the OTC you are, Viles replied – our marching orders are not to exceed the OTC for more than 30 minutes. So basically, if you’re exceeding the OTC, you’re only in a bad situation, transmission system-wise, if something else happens? Palensky asked. That’s essentially correct, but the main period when we have a high risk of multiple contingencies is in the summer months, when lightning and fire are significant problems, Viles replied. When fires occur, you may not even be notified that they are threatening a line or lines, he said – you just never know what’s going to occur.

Earlier today, we talked about the Snake River fall Chinook study, which is addressing the survivability of fall Chinook – should they stay in the river, or be transported. That study results in spill, which causes you OTC problems. If the study continues for a number of years, it will continue to cause you problems for years, said Ruff. Is BPA planning further transmission system upgrades? I know they’re looking at a new Paul-Troutdale line, which would help the westside problems; putting some series capacitors in might also help on the north-south lines, Viles replied. Nothing that I’m aware of has been funded at this time, he added.

I would make the general statement that these conditions are only going to become more critical, said Wills – we can’t solve that problem here, but I hope it is being seriously addressed regionally.

C. Report on Corps’ System Flood Control Study. This item was deferred until the March IT meeting, at Rock Peters’ request; he said the study is scheduled to be available for regional review and comment by next week.

4. Planning/Decision-Making Issues.

A. Discussion of Fall/Winter Update of Water Management Plan. This topic was addressed earlier in today's meeting.

B. Summary of 2005 Salmon and Steelhead Outmigration. Wagner led this presentation, touching on the following major topics:

- Spring chinook at Lower Granite, smolt index, 2005 – this was a fairly typical outmigration, said Wagner; at Lower Granite, we saw a triple peak, which is not unusual. This was a maximum transportation year, he added, with an estimated 98-99 percent of all spring chinook and steelhead transported.
- Spring chinook + flow at Lower Granite, 2005
- Yearling chinook passage, combined, McNary Dam (bar graph) – 1992-2005
- Smolt index, Lower Granite, steelhead, 2005
- Smolt index + flow, Lower Granite, steelhead, 2005
- Steelhead passage, wild migrant, Lower Granite, 1992-2005 (bar graph)
- Fall chinook at Lower Granite, smolt index, 2005
- Subyearling chinook passage, wild trapped Snake outmigrants, Lower Granite Dam, 1992-2005 (bar graph)
- Yearling chinook passage, McNary combined, 1992-2005 (bar graph)
- Steelhead passage, combined, McNary, 1992-2005 (bar graph)
- Mean estimated survival through the hydropower system (Lower Granite-Bonneville), yearling chinook, 2001-2005. Survival, Lower Granite-Bonneville, 2005: 52.6 percent, significantly better than the 39.5% seen in 2004. Wagner noted that these figures are for the few fish that remained in-river only.
- Mean estimated survival through the hydropower system, steelhead originating in the Snake River, 2001-2005 (survival, Lower Granite-McNary, 2005: 59.4 percent, up from 37.9 percent in 2004)
- Mean estimated survival through the Lower Columbia hydropower system for yearling chinook originating in the Upper Columbia River (hatchery fish only), 2002-2005. McNary-John Day survival, 2005: 80.1%.
- Mean estimated survival through the Lower Columbia hydropower system, steelhead originating in the Upper Columbia River, 2002-2005. McNary-Bonneville survival, 2005: 53.3 percent.
- Population level detections at Lower Granite Dam in 2005-2006 for PIT-tagged natural subyearlings (graph)
- Lower Granite Dam cumulative passage, May 3-October 20, 2005 (graph)

- Snake River fall chinook hatchery fish released, 1994-2005 (bar graph)
- Snake River fall chinook, July 1-15, at Lower Granite Dam, 1994-2005 -- number of hatchery fish released vs. length of wild smolts.

C. Update on Spring Creek Hatchery Reprogramming and March Spill

Issue. Wills reported that, essentially, there has been no recent movement on this issue. Tim Roth gave a presentation to the IT on this topic last year; there hasn't been much progress on it since then, although discussions are ongoing. My understanding is that we are awaiting comments from the action agencies on what we have proposed, Wills said. My understanding is that there is no obvious funding source for the improvements that would be required for hatchery reprogramming to proceed, except from BPA? Marker asked. No, that isn't correct, Wills replied – the Fish and Wildlife Service has committed about \$750,000 to reprogramming. A majority of the capital construction cost is being rounded up by USFWS, and we are confident that those funds are available. The issue is actually annual operating costs, he said. There was also an ESA issue, Ruff observed – what are the action agencies doing on this issue currently?

It has been worked at several levels, Peters replied; it's being worked at the policy level right now. One issue is that the Corps was not involved in developing this alternative. Our overall goal for John Day Dam mitigation is to replace in kind above the Zone 6 fishery. We want to look at potential costs associated with replacing in kind. My understanding is that there was an additional construction cost of \$1.4 million to the Corps, plus \$500,000 per year in operating costs, said Peters. That money has not been programmed, and we don't have it right now. We're looking for the least-cost solution, and told the district to develop a product, and to work with the Fish and Wildlife Service to find a resolution that works, Peters said. I would add that this isn't just a USFWS proposal, said Wills – US v. Oregon is a strong supporter as well.

With respect to this year's Spring Creek Hatchery release, I haven't attended any meetings where that has been discussed, said Peters. That was discussed yesterday at TMT, Wills replied; this year's release is scheduled for March 3, and they will begin marking fish some time next week. The March release group is 7.5 million fish. There is a bit of wiggle room in the release date to help us accommodate the operating agencies' needs, said Wills; we will bring our proposal for the release to the February 1 TMT meeting. We're certainly hoping the current wet weather continues, Wills said; everyone was disappointed by the contribution corner collector operation made to high TDG levels over the chum redds downstream of Bonneville, in 2005, due to the low flows and low tailwater elevations at that time. Peters noted that one key element, for the Corps, is finishing the new antenna array at the corner collector. It was agreed that the IT will hear an update on both the funding issue and the 2006 hatchery release plan at its next meeting.

5. Regional Forum Process Issues.

A. Update on Washington State Columbia River Water Initiative. Jerry O'Keefe of the Washington Department of Ecology said that, several years ago, many in Washington concluded that the status quo in Washington State, which includes no new water rights from the Columbia since the late 1980s, is unsustainable. New population and development pressures are going to force the state to issue some new water rights in the near future. As you know, the intensity of emotions surrounding water rights issues runs high; we're trying to construct a sustainable policy solution both for fish and for the human population. The motivation is to try to take some of the pressure off, and at the same time, to develop a water resources policy for the river that will link economic interests with environmental issues. Bill Tweit and I have spent a lot of time on this issue together, an indication of the pragmatic approach we're taking – these two interests have to co-exist in the river, and it's best to recognize that up-front, O'Keefe said.

We started this initiative in 2001, said O'Keefe; there was a proposal for a mitigation standard for the river that was quite accounting-heavy, with a mathematical mitigation formula that was proposed to be included in state policy. It included between-season flow shifts, capturing flows during the winter and finding ways to move flows from winter to summer. We have spent a lot of time learning about what tools may be available to help us do that, O'Keefe said. The idea was three in and two out – we would shift three buckets of water during the winter, and take out two during the summer for extractive uses, while leaving one in the river for fish. That particular formula died in the last session of the legislature; that gave us the space necessary to create the new Columbia River Task Force.

Governor Gregoire is interested in improving economic conditions and improving conditions for fish, O'Keefe continued. We have spent the last six or seven months meeting with the task force and have heard a lot from stakeholders, but I can't say there have been any fundamental shifts in the points of view, he said. We have been discussing the standard for mitigation. If the old standard was three in, two out, to improve conditions for fish in the summer, and if the standard was no net loss in the 2000 BiOp, we still have not settled on an appropriate mitigation standard as a state.

While I can't say I'm optimistic, overall, that that can be accomplished, I will say that a broad spectrum of interests are very much engaged in this process, said O'Keefe. There is also intense interest in the BiOp remand process. We will need federal partners in order to do some of the things we want to do – make a positive contribution to recovery and provide a pot of water available for out-of-stream use. At least as I think about these things, the biggest-picture win-win strategies we formulated within the CRI may make some sense as a part of a recovery strategy for the basin, O'Keefe said. I am meeting later this morning with the Governor to talk about our approach to legislation; I expect to see several different bills dropped on the legislature in the next couple of days, he said. It is often the case that these bills look inert from a surface level; they just

don't move despite the fact that active conversations are going on. Within the administration here, there is a recognition of the need to have a positive story to tell about how the state's water resources program is making a positive contribution to salmon recovery.

You're making a pitch to move water from winter to summer, said Ruff; I hope you're aware that the NMFS BiOps have been trying to do that all along, i.e., to hold storage projects at URC and refill so that we have the maximum amount of water available for flow augmentation during the summer. That strategy fits in with what you have described. I do know that, said O'Keefe; our strategy is to augment that if possible, conceivably by obtaining additional water from Canada. Those negotiations have stalled, but to the extent to which the state can put its shoulder to the wheel to help make that happen, I hope that is possible. Another hot topic here is global warming and the increasing demand for water, and the fact that we need to get moving on additional storage. There is a proposal called Black Rock, which is intended to benefit the Yakima River and the Columbia below that, O'Keefe said. We have also completed a pre-appraisal of about 25 additional storage projects, ranging in size from 300,000 acre-feet to about 2.5 MAF. We will be continuing analysis of the feasibility of those additional storage projects, O'Keefe said.

As a state, we have a level of commitment that where we're making changes to the status quo, we will analyze the impacts of those changes, particularly the negative impacts, said Bill Tweit. Most proposals do not analyze those negative impacts, or propose any mitigation – that's why we're a little farther ahead than other folks, said Tweit.

You refer to the BiOp remand and collaboration process, Ruff said – are you coordinating what you propose with Bob Nichols and Guy Norman? We meet regularly to talk about these issues, O'Keefe replied, but we're still at a fairly early stage in defining what the state wants to do. This isn't something that is just operating out of an agency, O'Keefe said – as I said before, I'm meeting with the Governor in a few minutes.

It is interesting that Washington is also interested in additional Canadian storage, said Ruff – that came up in the preliminary injunction as well. We are interested, as is CRITFC, said O'Keefe – we don't know how feasible it is, but let's explore it. Canada has said that they are interested in solutions that are mutually beneficial, he added, and is willing to explore those with BPA and the Corps.

And do you have any sort of a document explaining where you are in your process? Ruff asked. No – I really don't, O'Keefe replied – all I have is a draft bill, at this point. As we have things to share, I will commit to providing that to the IT, said Tweit. There is also a lot of information on the WA DOE website, Denny Rohr noted.

B. Report on December 21 Meeting of the Regional Forum Subgroup. The purpose

of this group is to look ahead to develop a schedule for what issues the IT should be working on, and when, to stay well ahead of the curve, said Marker. That subgroup met in December and identified many of the issues we've been discussing today; we also discussed pinnipeds. Our discussion really only extended into about March, said Marker; we would like to keep pushing the issue planning for IT out farther into the future, and also involve the chairs of SCT, TMT and WQT in those discussions.

One difficulty affecting attendance at IT lately is that the BiOp remand collaboration meetings are also being held on Thursdays, said Ruff; they are drawing away many people who would normally attend our meetings. He suggested that the IT may wish to go to a meeting schedule of every six or eight weeks. Marker noted that the collaboration group's meeting schedule is somewhat fluid; given the importance of some of the issues the IT is discussing, I would urge you to keep meeting monthly, he said.

C. Long-Term Strategic Planning. This topic was addressed during the previous agenda item.

6. Next IT Meeting Date.

The next meeting of the Implementation Team was scheduled for Thursday, February 2. Meeting summary prepared by Jeff Kuechle, BPA contractor.